

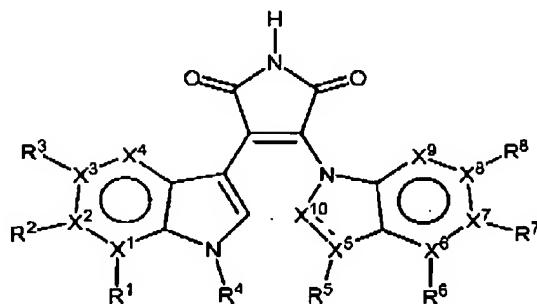
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CENTRAL FAX CENTERAmendments to the Claims:

MAR 06 2008

**This listing of claims replaces all prior versions of claims in the application**

1-30 (cancelled)

31. (currently amended) A compound represented by the following formula:



or a pharmaceutically acceptable salt thereof

wherein:

 $X^1 - X^3$  are independently C; $X^4$  is CH; $X^6 - X^8$  are independently C; $X^9$  is CH; $X^{10}$  is CH, when the bond between  $X^5$  and  $X^{10}$  is a double bond; or $X^5$  is CH,  $R^5$  is H, and  $X^{10}$  is  $CH_2$ , when the bond between  $X^5$  and  $X^{10}$  is a single bond; or $X^5$  is C,  $R^5$  is defined below, and  $X^{10}$  is CH, when the bond between  $X^5$  and  $X^{10}$  is a double bond;when  $X^1 - X^3$  or  $X^6 - X^8$  is C, each respective  $R^1 - R^3$  and  $R^6 - R^8$  is independently selected from the group consisting of:

- a) H, substituted or unsubstituted C(1-8) alkyl, halogen, azido, cyano, nitro, or  $NR^{21}R^{22}$ , wherein  $R^{21}$  represents H or C(1-8) alkyl, and  $R^{22}$  represents H, substituted or unsubstituted C(1-8) alkylcarbonyl, substituted or unsubstituted arylcarbonyl, heterocycle, substituted or unsubstituted heteroarylcarbonyl,

substituted or unsubstituted C(1-8) alkylaminocarbonyl, substituted or unsubstituted arylaminocarbonyl;

b) OR<sup>23</sup>, wherein R<sup>23</sup> is H, substituted or unsubstituted alkylcarbonyl, substituted or unsubstituted arylcarbonyl;

c) SR<sup>23</sup>, wherein R<sup>23</sup> is defined as in b);

d) O(CH<sub>2</sub>)<sub>j</sub>-R<sup>24</sup>, O(CH<sub>2</sub>)<sub>j</sub>-O-R<sup>24</sup>, or O(CH<sub>2</sub>)<sub>j</sub>-S-R<sup>24</sup>, wherein j is an integer from 1 to 8, and R<sup>24</sup> is selected from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl;

e) S(CH<sub>2</sub>)<sub>j</sub>R<sup>24</sup>, S(CH<sub>2</sub>)<sub>j</sub>-O-R<sup>24</sup>, or S(CH<sub>2</sub>)<sub>j</sub>-S-R<sup>24</sup>, wherein j and R<sup>24</sup> are defined as in d);

f) C≡C-R<sup>25</sup>, C≡C-OR<sup>25</sup>, or C≡C-CO<sub>2</sub>R<sup>25</sup>, wherein R<sup>25</sup> is H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl;

g) CH=CH-R<sup>25</sup>, CH=CH-OR<sup>25</sup>, or CH=CH-CO<sub>2</sub>R<sup>25</sup>, having a stereochemistry of E or Z, and R<sup>25</sup> is defined as in f);

h) C≡C-NR<sup>25</sup>R<sup>26</sup> or C≡CCONR<sup>25</sup>R<sup>26</sup>, wherein R<sup>25</sup> is defined as in f), and R<sup>26</sup> is defined as R<sup>25</sup>, and R<sup>25</sup> and R<sup>26</sup> are selected independently;

i) CH=CH-NR<sup>25</sup>R<sup>26</sup> or CH=CHCONR<sup>25</sup>R<sup>26</sup>, having a stereochemistry of E or Z, wherein R<sup>25</sup> and R<sup>26</sup> are independently defined as in h);

j) (CH<sub>2</sub>)<sub>k</sub>R<sup>25</sup>, (CH<sub>2</sub>)<sub>k</sub>-COOR<sup>25</sup>, or (CH<sub>2</sub>)<sub>k</sub>-OR<sup>25</sup>, wherein k is an integer from 2 to 6 and R<sup>25</sup> is defined as in f);

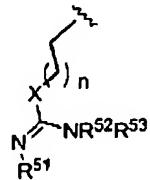
k) (CH<sub>2</sub>)<sub>k</sub>NR<sup>25</sup>R<sup>26</sup>, (CH<sub>2</sub>)<sub>k</sub>CONR<sup>25</sup>R<sup>26</sup>, wherein R<sup>25</sup> and R<sup>26</sup> are selected independently, and R<sup>25</sup> and R<sup>26</sup> are defined as R<sup>25</sup> in f); and

l) CH<sub>2</sub>XR<sup>27</sup>, wherein X is O or S and R<sup>27</sup> is H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl;

R<sup>4</sup> is selected from the group consisting of:

m) H, substituted or unsubstituted C(1-8) alkyl; and

n)

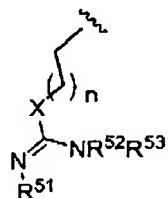


wherein X=O, S, or NH, n=1 to 4; and wherein R<sup>51</sup> is H; R<sup>52</sup> and R<sup>53</sup> are independently chosen from the group consisting of H, substituted or

unsubstituted C(1-8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R<sup>51</sup> and R<sup>52</sup> are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system;

R<sup>5</sup> is selected from the group consisting of:

- p) H, substituted and unsubstituted C(1-8) alkyl; and
- q)



wherein X=O, S, or NH, n=1 to 4; and wherein R<sup>51</sup> is H; R<sup>52</sup> and R<sup>53</sup> are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R<sup>51</sup> and R<sup>52</sup> are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system[[.]];

with the proviso that when X<sup>1</sup>-X<sup>3</sup> are all C, R<sup>1</sup>-R<sup>3</sup> are all H, X<sup>4</sup> is CH, X<sup>5</sup> is C, R<sup>5</sup> is H, X<sup>10</sup> is CH, X<sup>6</sup>-X<sup>8</sup> are all C, R<sup>6</sup>-R<sup>8</sup> are all H, and X<sup>9</sup> is CH, then R<sup>4</sup> is not CH<sub>3</sub>.

32. (previously presented) A compound, according to claim 31, in which X<sup>1</sup> - X<sup>3</sup> are independently C.

33. (previously presented) A compound, according to claim 31, in which X<sup>4</sup> is CH.

34. (previously presented) A compound, according to claim 31, in which X<sup>6</sup> - X<sup>8</sup> are independently C.

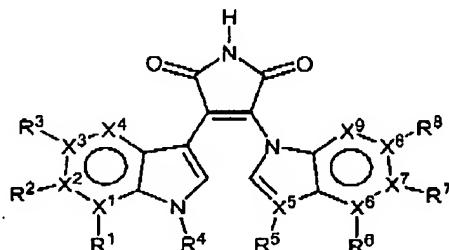
35. (previously presented) A compound, according to claim 31, in which X<sup>9</sup> is CH.

36. (previously presented) A compound, according to claim 31, in which X<sup>5</sup> is C, X<sup>10</sup> is CH and the bond between X<sup>5</sup> and X<sup>10</sup> is a double bond.

37. (withdrawn) A compound, according to claim 31, in which X<sup>5</sup> is N, R<sup>5</sup> is a lone pair, X<sup>10</sup> is CH and the bond between X<sup>5</sup> and X<sup>10</sup> is a double bond.

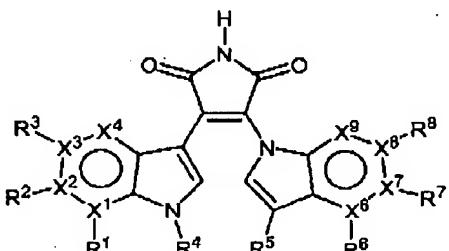
38. (previously presented) A compound, according to claim 31, in which  $X^5$  is CH,  $R^5$  is H,  $X^{10}$  is  $CH_2$  and the bond between  $X^5$  and  $X^{10}$  is a single bond.

39. (previously presented) A compound having the following formula:



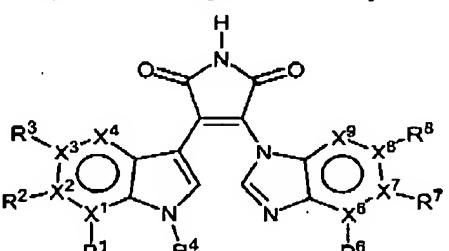
wherein  $X^5$  is C, and  $X^1-X^3$ ,  $X^4$ ,  $X^6-X^8$ ,  $R^1-R^3$ ,  $R^4$ ,  $R^5$  and  $R^8-R^8$  are as defined in claim 31.

40. (previously presented) A compound having the following formula:



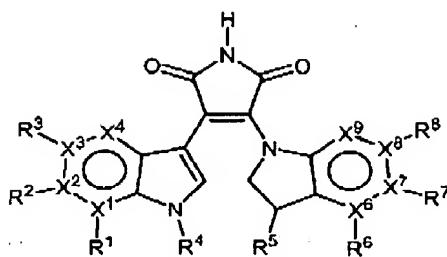
wherein  $X^1-X^3$ ,  $X^4$ ,  $X^6-X^8$ ,  $R^1-R^3$ ,  $R^4$ ,  $R^5$  and  $R^8-R^8$  are as defined in claim 31.

41. (withdrawn) A compound having the following formula:



wherein  $X^1-X^3$ ,  $X^4$ ,  $X^6-X^8$ ,  $R^1-R^3$ ,  $R^4$ ,  $R^5$  and  $R^8-R^8$  are as defined in claim 31.

42. (previously presented) A compound having the following formula:



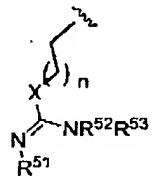
wherein  $X^1$ - $X^3$ ,  $X^4$ ,  $X^6$ - $X^8$ ,  $R^1$ - $R^3$ ,  $R^4$ ,  $R^5$  and  $R^6$ - $R^8$  are as defined in claim 31.

43. (previously presented) A compound, according to claim 31, in which when  $X^1$  -  $X^3$  or  $X^6$  -  $X^8$  is C, each respective  $R^1$  -  $R^3$  and  $R^6$  -  $R^8$  is independently selected from the group consisting of:

- a) H, halogen;
- b)  $OR^{23}$ , wherein  $R^{23}$  is H, substituted or unsubstituted alkylcarbonyl, substituted or unsubstituted arylcarbonyl; and
- c)  $O(CH_2)_jR^{24}$ ,  $O(CH_2)_jO-R^{24}$ , or  $O(CH_2)_jS-R^{24}$ , wherein  $j$  is an integer from 1 to 8, and  $R^{24}$  is selected from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl.

44. (previously presented) A compound, according to claim 31, in which  $R^4$  is selected from the group consisting of:

- m) H, substituted or unsubstituted C(1-8) alkyl; and
- n)

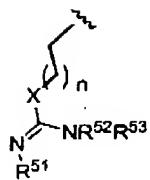


wherein  $X=O$ ,  $S$ , or  $NH$ ,  $n=2$ ; and wherein  $R^{51}$  is H;  $R^{52}$  and  $R^{53}$  are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or  $R^{51}$  and  $R^{52}$  are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system.

45. (previously presented) A compound, according to claim 44, in which  $R^4$  is selected from the group consisting of:

- m) H, substituted or unsubstituted C(1-8) alkyl; and

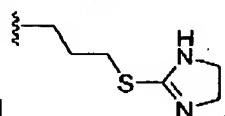
n)



wherein X=S, n=2; and wherein R<sup>51</sup> is H; R<sup>52</sup> and R<sup>53</sup> are both H, or R<sup>51</sup> and R<sup>52</sup> are combined to form a heteroaryl ring system.

46. (previously presented) A compound, according to claim 45, in which R<sup>4</sup> is selected from the group consisting of: H, methyl, CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>OH, CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>,

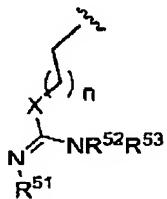
CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>N<sub>3</sub>, CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SC(=NH)NH<sub>2</sub> and



47. (withdrawn) A compound, according to claim 31, in which X<sup>5</sup> is N and R<sup>5</sup> is a lone pair.

48. (previously presented) A compound, according to claim 31, in which X<sup>5</sup> is C or CH, and R<sup>5</sup> is selected from the group consisting of:

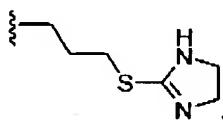
- p) H, substituted and unsubstituted C(1-8) alkyl; and
- q)



wherein X=S, n=2; and wherein R<sup>51</sup> is H; R<sup>52</sup> and R<sup>53</sup> are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R<sup>51</sup> and R<sup>52</sup> are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system.

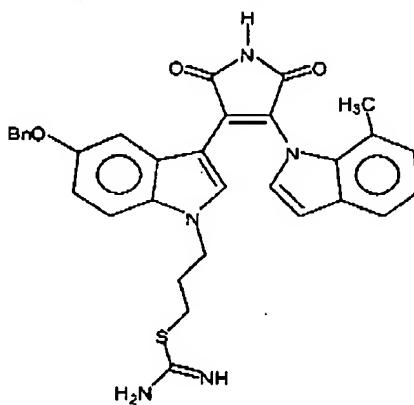
49. (previously presented) A compound, according to claim 48, in which X<sup>5</sup> is C or CH, and R<sup>5</sup> is selected from the group consisting of H, methyl, CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>OH,

CH2CH2CH2SC(=NH)NH2, CH2CH2CH2N(CH3)2, CH2CH2CH2N3, CH2CH2CH2NH2, and



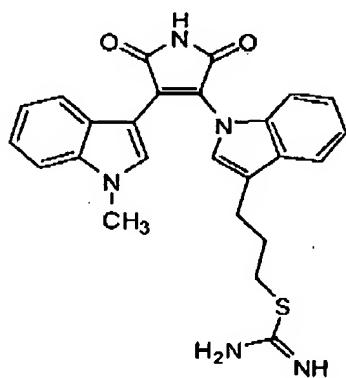
50. (cancelled)

A compound, according to the following formula



51. (cancelled)

A compound according to the following formula:



52. (previously presented) A composition comprising a compound, according to claim 31, in combination with carrier.

53. (withdrawn) The composition, according to claim 52, further including a chemotherapeutic agent.

54. (withdrawn) The composition, according to claim 52, further including a cytokine.

55. (withdrawn) The composition, according to claim 52, further including anti-sense oligonucleotides.

56. (withdrawn) A method of treating an inflammatory disorder, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 31 or 52, so as to treat the disorder.

57. (withdrawn) A method of treating cancer, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 31 or 52, so as to treat the cancer.

58. (withdrawn) A method of treating a cell proliferative disorder, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 31 or 52, so as to treat the disorder.

59. (withdrawn) A method of treating cancer, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 31 or 52, in combination with another chemotherapeutic agent.

60. (withdrawn) Use of a compound or a composition, according to claim 31 or 52, so as to induce apoptosis in Jurkat cells.

61. (withdrawn) Use of a compound or a composition, according to claim 31 or 52, so as to induce apoptosis in cancer cell lines.

62. (withdrawn) The use, according to claim 31, in which the cancer cell lines are prostate cancer and breast cancer cell lines

63. (withdrawn) A method of treatment or prevention of a condition resulting from loss of growth and cellular differentiation control, the method comprising: administration to a subject in need thereof an effective amount of a compound or a composition, according to claim 31 or 52, so as to treat or prevent the condition.